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ARTICLES

Research Articles

Full Length Research Paper

Information needs, library resources and services available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria

Felicia U. Iwara

Kenneth Dike Library, University of Ibadan, Nigeria.

The study evaluated information needs and library resources available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria. One hundred and fifty-five copies of questionnaire were administered to postgraduate students in Peace and Conflict Studies (PCS), African Studies (AFS) and Peace Building (BD) units. The study identified Kenneth Dike, WORDOC and IFRA as libraries normally used by postgraduate students of the Institute of African Studies. The study shows that the library resources/materials in the Institute of African Studies library were readily available and accessible; and that 79.4% of postgraduate students were satisfied with the available library materials. Theses and dissertation and journal articles were the most frequently referenced library materials. The study further revealed that journal articles and textbooks/monographs were the main library materials required by research students. Result of One-Way Analysis of Variance indicated that the postgraduate level of satisfaction with library materials do not vary significantly (F = 0.895, p>0.05). The study recommended that the Institute of African Studies library should be updated in terms of acquiring current books, journals and audio-visual materials to make it the most referenced library in order to meet the needs of Institute of African Studies researchers.

Key words: Information need, Institute of African Studies, library resources and services, postgraduate students.

INTRODUCTION

The Institute of African Studies University of Ibadan was established by an Act of the Senate, in July 1962. It was conceived as an interdisciplinary research institute. It was a beneficiary of the Rockefeller and Ford Foundations. In September 1969, the National Universities Commission recommended that the Federal Military Government take over the financial responsibility for the institute as an

integral arm of the university. African Studies is a multi-disciplinary program where the research tools of various disciplines are brought to bear on the study of African Culture. These studies cover African Traditional Religion, African Law, Visual Arts, Music, Dance Studies-African Dance to Performance Studies, Peace and Conflict Resolution, History, Linguistics, Religious Belief and

Thought System. The study of Traditional Culture is necessarily a multi-dimensional task since the music, poetry; dance, sculpture and painting form an integral system which is directly woven into the economy, the political, social structure and the religions of African societies. The institute's aim in undertaking such research and initiating similar projects is three fold. The first is to set a high standard of scholarship in African Studies generally, the second is the encouragement of a consciously imaginative development of new cultural forms and of new adaptations to modern life and the third is to enlist the attention and co-operation of pioneers and workers in such fields, as well as provide storage for the resulting specialized materials. The long-term task of the Institute of African Studies is to co-operate with the many departments of the university in developing the African aspect of their various disciplines, with primary relevance to the postgraduate program of the university. In October 1980, following the directives of the University Senate, the institute initiated a postgraduate teaching program. However, being a unique institute and the direction of research which is basically of the African perspective, getting access to information on a wide variety of issues could be perturbing and sometimes frustrating to students.

The postgraduate students need access to different types and formats of information, including textbooks, journals and serials amongst others. It is often acknowledged that information is power. Information is needed for a variety of purposes and its use depends on its availability. Chambers Encyclopedia (1970) defined information as that, which reduces doubt or uncertainty about a particular problem situation or circumstance. Libraries in Nigeria are not well funded as books are insufficient and many of the available books are out-of-date. This contributes to compound the information needs of students which could deny them access to current information on concepts, methods and theories in different fields of human endeavors. With the advent of Information and Communication Technology (ICT), mostly the internet, the information need of students is resolved as students now have access to the latest information and materials. The internet as well as the publishing of articles online using the open access option has come in to ease the problem of accessibility of information materials (Echezona et al., 2011). These recent technologies in the academic environment enable students to come to terms with research frontiers from other countries, thereby making research less difficult. But the use of the internet is depended on socio-economic background of students; and not all students can access the internet daily due to power (electricity) failure. This therefore means that the library still serves as a place of seeking information. Thus understanding the information needs and sources of information used by postgraduate students will help the library to acquire regular and current journals and other information sources

that are constantly required by postgraduate students during the course of their programs. The information will help make research into African Culture, Religion, Peace and Conflict resolution more interesting as well as help expand the theories and application of models in understanding African Traditional Culture. The availability of up-to-date and readily available information is largely depended on its acquisition. Thus, the acquisition of information for the Institute of African Studies Library will help students to conduct effective research for the overall growth of the African culture. Several studies have been carried out to understand the information needs of students. Others looked at the information needs of respective departments, but the information needs and library resources available to postgraduate students of the Institute of African Studies have been little investigated. It is on this basis that the study evaluates the information needs, library resources and services available to post graduate students in the Institute of African Studies, University of Ibadan, Nigeria.

The library is one of the research facilities in the Institute of African Studies. It maintains sizeable reference materials of six thousand titles at present. These collections reflect selective coverage of subjects. These include African history, Sociology, Political Science, Linguistics, Archaeology, Anthropology, Music and Visual Arts. There is also a collection of reprint papers, conferences, seminar papers and cultural films. The open shelves contain six thousand titles of books, reserved titles, one thousand five hundred, three hundred and sixty journal titles mostly unsubscribed, ninety six theses, five dissertations, eight hundred and eleven Masters Projects. Other materials are: seventy two boxes of reprints, one box of seminar papers and magazines. The Institute subscribes to Tell and Newswatch magazines, conference papers, brochures in seventy boxes, a backlog of newspapers for seven years for binding. The list of recorded sounds available in the Senior Library Officer's office is as follows; one thousand eight hundred and twenty eight, Reel to Reel long recorded sound tapes, sixty one Reel to Reel short recorded tapes, four Audio recorded cassettes, ninety eight phonograph records, fifty Reel to Reel films. Peace and Conflict Resolution programme is about thirteen years in the Institute of African Studies and has a very rich collection of books. The Resource Center is named after the donor Dr Abolurin (Commandant Civil Defense). The books are mainly on Peace Building and Conflict Resolutions. The resource holding is over four thousand titles of books. In addition to the Institute of African Studies Library and Abolurin Resource Center, the Institute has three documentation centers namely; Center for Arabic Documentation, Documentation Center for Traditional Medicine and the French Institute for Research in Africa. The documentation centers mentioned also assist the research students in their studies in their various disciplines of interest. The Institute's museum has a very

interesting collection of over two thousand ethnographic materials and traditional arts objects. Most of the objects are from Nigeria and other African countries as well as Brazil which has historical connections with Nigeria. The Institute of African Studies houses major part of the University of Ibadan ethnographic and fine art collection which reflects research interest of the Institute of African Studies. It contains examples of material culture, carved masks, cloth costumes of cult group masquerades, religious political insignia, carvers and porters' tools, divination apparatus, fishing and farming implements, house hold furnishings and utensils, paintings, prints, drawing and sculptures. At present there are over one thousand objects from Nigeria, Mali, Ivory Coast, Dahomey, Togo and the Cameroon as well as Brazil with which Africa has historical connections. These objects are acquired through direct purchase on location. Some of these items are gifts, such as the Benin antique of 1897. The Institute is also a patron of modern art in Nigeria and has a growing collection of unique paintings, sculpture, cloth and metal work. The Institute's Library and Resource Center open Monday – Friday at 8am – 4pm. The staff renders reference, readers and repro-graphic services to the students. The library is closed for a week each month during examination to enable the Senior Library Officer participate in the 24 h library services of the Main Library (Kenneth Dike Library). Within that period, the library is always locked for security. The Senior Library Officer and a Library Assistant were the members of staff in the library. At present, the Senior Library Officer is the only staff managing the library because the university generally is short staffed.

Scope of the study

The study was limited to postgraduate students of the Institute of African Studies, University of Ibadan. It covered research students in three units of Peace and Conflict Studies, African Studies and Peace Building. The survey was carried out in the 2011/2012 academic session.

Objectives of this study

The specific objectives of the study were:

1. Determine the information needs of the postgraduate students.
2. Examine library resources available to postgraduate students

LITERATURE REVIEW

There are different sources of information. Information

needs of Postgraduate Students are important for the Institute's library in improving their collections and services with the available library resources. Information needs according to Case (2002), is a recognition that your knowledge is inadequate to satisfy a goal that you have. The type of information a user needs depends entirely on the user of the information. Researches have been carried out by a number of scholars about information needs and they found out that 'information needs' is complex and as such the need for specific information must be determined by the user/user group (Adelani, 2002). Studies by Sohail et al. (2012), in the use of library resources and services, found out that, the students needed to be guided by reference librarians to meet their information needs. Library Orientation pro-grams are organized in Kenneth Dike Library which is the Main Library of the University of Ibadan for new students and postgraduate students for effective use of the library resources. Needs differ according to the user group. Ehikhamenor (1990) observed that information needs of academic scientists are not quite the same as those of the scientist in industries. Certainly information needs of an Arts researcher can never be the same as a technician. Information needs (Akinola, 2009) are an individual or groups or companies desire to locate and obtain information to satisfy needs. Ranganadham and Babu (2012) studied the awareness and use of library resources and services at Osmania University, Hyderabad. They studied the adequacy of library resources and satisfaction in sources of information. Research studies have been carried out which examine the information needs and library resources available to user groups such as academics, non-academic, researchers, scientists, technologists while other studies distinguish between these groups depending on their various faculties (Brown, 1999; Msuya, 2002; Callinan, 2005). The information resources can be divided into two, library and non-library resources (Uhegbu, 2001). Library resources include text books, journals, newspapers, magazines, E-classroom, ICT unit and others. Non-library resources include the television, radio, posters and handbills but the resource of interest is the library resources made available and accessible to postgraduate students of the Institute of African Studies. According to Uhegbu (2001), for any collection to be called a library or a resource center it must satisfy the following basic prerequisites:

1. be a reservoir of recorded knowledge, either in print or non-print;
2. prepared for use and arranged in a systematic way; offer services which are in consonance within and outside its area of location and literal to the extent of its objectives, philosophy and policy.

Information is an essential resource which individuals in every society should have access to (Kantumoya, 1992). According to Opeke (2002), information can be

Table 1. Library mostly used by respondents.

Library used	Frequency	%
Institute of African Studies	12	7.7
Kenneth Dike Library	67	43.2
WORDOC Library	32	20.6
IFRA Library	20	12.9
Social Science Library	8	5.2
Abolurin Resource Library	16	10.3
Total	155	100

conceptualized as the gateway to other resources, be it social, economic, technological or educational. Information need, in information science, according to Kahthau (1993), evolves from a vague awareness of something missing and culminating in locating information that contributes to understanding and meaning of what is needed. Wilson (1997) points out that, there must be an accompanying motive when a person experiences an information need. Thompson (2004) saw information needs as what one must look for to support his/her profession. Needs are matters of priority, what we need is an overriding reason. Haruna and Mabawonku (2001) suggested that needs arise when the state of possessed knowledge is less than what is needed to deal with some issues and that information needs are diverse, constantly changing and not amendable to generalization. Students are always determined to seek information to enhance their research. Bii and Otike (2003) studied the provision and accessibility of health information. The study pointed to the fact that health information sources made available and accessible were non-library resources. Okey (1999), on the information needs of the rural dweller, found out that utilization of information sources may not necessary be determined by age but depends also on the accessibility and awareness of such sources.

METHOD

The descriptive survey design was adopted for this study. The population of the study comprised all postgraduate students of the Institute of African Studies, University of Ibadan, Nigeria. The participants cut across the three units under the Institute of African Studies; the units were Peace and Conflict Studies (PCS), African Studies (AFS) and Peace Building (PB). Participants were approached at their respective lecture halls and after consent was granted, the instrument was administered to the students. Stratified sampling technique was employed, since the Institute had three units as mentioned above. In all, one hundred and fifty-five copies of structured questionnaire were administered; PCS had 85 copies, AFS had 25 copies and PB had 45 copies.

A self-constructed structured questionnaire was used for the study. The questionnaire was divided into four sections: A, B, C and D. Section A measured students' demographic characteristics; Section B measured respondents' information needs; Section C measured availability of library materials, while Section D measured respondents' level of satisfaction with available library resources as well as accessibility to library materials. Data obtained from the

administered questionnaire were analyzed using simple percentages and Pearson Product Moment Correlation through the use of Statistical Package for Social Science (SPSS) version 20.0 software for Windows and were depicted in tables and charts.

RESULTS

The result of the study revealed that, the library most used by respondents is Kenneth Dike (Table 1). WORDOC and IFRA were identified as the libraries normally used for gathering and searching for information in relation to African literature and Women Research and Documentation. Nevertheless, Kenneth Dike Library was the most used library by postgraduate students for related information because KDL is the Main Library of the University of Ibadan. The library has most of the library resources needed by the postgraduate students namely – OPAC service, E-Resource Retrieval facility, Text books, Current Journals and Project/Thesis which are not available in the Institute of African Studies Library. However, the three commonly used libraries serve as places to enhance research in different fields of African related studies such as Peace and Conflict Studies, African Studies, Peace Building and Women Research Documentation Centre among others.

Level of accessibility to library

Accessibility to information remains paramount in postgraduate research discourse. In order to ascertain the level of accessibility to library materials, respondents were asked to ascertain the level of accessibility to library resources; the outcome of the enquiry showed that materials in the library were readily accessible with 78.7% of the overall responses (Figure 1). In addition, 7.7% of the respondents were of the opinion that materials in the libraries are slightly accessible; to this group of persons, they do not have complete access to all required information, while 13.5% asserted that materials in the library are inaccessible. The result obtained here however reveals that information is generally accessible to respondents in the Institute of African Studies Library and other libraries in the University of Ibadan.

Frequently referenced library materials

The information in Table 2 shows that theses, dissertation and journal articles were the most frequently referenced materials by respondents. This is obvious as the study focused on postgraduate students. This was closely followed by textbooks/monographs. These frequently used library materials enable research gaps to be identified for further investigation as well as provide theoretical and methodological clarification in African studies research. They also help in shaping present study
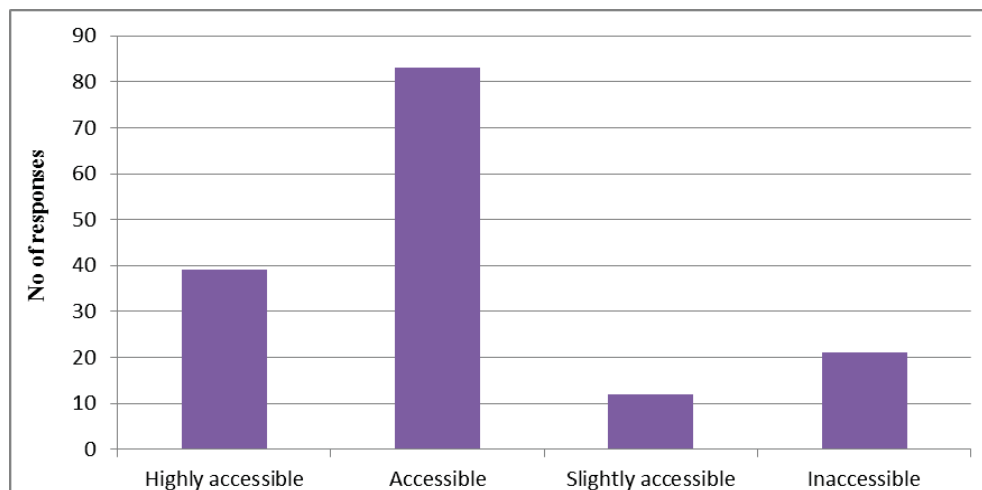
Figure 1. Accessibility to information in the library.

Table 2. Frequently used library materials.

Material	Frequency	Percentage
Textbooks/Monographs	18	11.6
Journal articles	31	20
Reference materials	15	9.7
Conference proceedings	6	3.9
Theses and dissertation	46	29.7
Reprographic services	9	5.8
Abstract/Indexes	10	6.5
Bibliographic services	20	12.9
Total	155	100

Source: Field data.

Table 3. Library resources/materials readily available to respondents.

Resources	Frequency	Percentage
Books	7	4.5
Journals	36	23.2
Theses and dissertation	77	49.7
Newspapers/Magazines	30	19.4
Conference proceedings	5	3.2
Total	155	100

Source: Field data.

and make discussion easier as well as serve as guide to prospective studies. Above all, theses, dissertation and journals provide basis for literature search. Other frequently used library materials for postgraduate research included abstract/indexes and reference materials. These library materials remain essentials in achieving cutting-edge research.

Availability of library materials

Table 3 gives vital information on library materials that are readily available to respondents. It indicates that theses, dissertation, journals and newspapers/magazines were library resources readily available to respondents for onward reference. This is obvious as they constitute materials often used for postgraduate research. Newspaper/magazines are used by the respondents to find information on diverse facet of the economy such as vacancies, sport, national and internal news as well as literature for academic purpose. Journals and theses on the other hand serve as guide for academic discourse.

Other library resources readily available but seldom used included conference proceedings and textbooks.

Library materials and utilization

The information in Table 4 shows that among the various library resources, thesis and dissertation were used daily, followed by newspapers/magazines. As noted earlier, these materials provide respondents with required information on daily basis. For the respondents, thesis and dissertation provide the basis for postgraduate research, mostly African studies which have a unique method of investigation. For materials used once in a week, newspaper/magazines as well as theses and dissertation were on the lead. This is apparent as they are often used by respondents' week in week out. It further reveals that conference proceedings and books constituted library resources occasionally used by respondents. This therefore implies that thesis/dissertation, newspapers/magazines and journals constitute library materials frequently in use. Conference proceeding are occasionally used and serves as last resort for literature search, as the respondents basically concentrate on theses/dissertations and journals.

Table 4. Library resource and frequency of use.

Resources	Frequency				
	Daily	Once a week	Twice a week	Fourth nightly	Occasionally
Books	0	15	43	61	37
Journals	9	18	60	29	20
Thesis and dissertations	105	24	8	7	0
Newspapers/Magazines	31	76	13	40	19
Conference proceedings	10	22	31	18	79

Source: Field data.
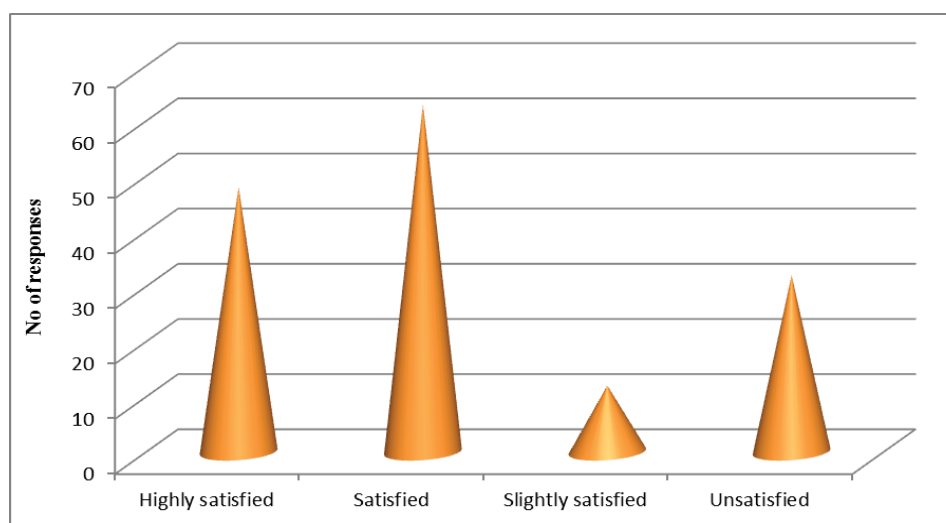
Figure 2. Respondents' satisfaction with library materials.

Level of satisfaction

Figure 2 assesses respondents' level of satisfaction with available library materials. The results in the figure reveal that 71.6% of respondents were satisfied with the availability of library materials, while 20.6% were unsatisfied. To this group of displeased persons, the university should re-print and update materials in the library, as some of the library materials are obsolete and many have depreciated. For instance, some of the respondents noted that theses catalogues need to be replaced as most of the titles have been torn, which make it difficult to search for theses titles in the library. The theses titles really need to be properly typed out and bound. The titles also have to be entered in the Institute of African Studies library data-base for easy retrieval of reference resources. In general, the result indicates that respondents that make use of the library materials are satisfied and pleased with the available resources.

Category of information sourced by respondents

In Table 5, the results show that academic information

Table 5. Type of information usually sourced by respondents.

Type of information	Frequency	%
Academic information	85	54.8
Employment information	31	20
Information for personal development	19	12.3
Health information	8	5.7
Political/global information	12	7.7
Total	155	100

Source: Field data.

was the main information required by respondents, which perhaps was the motive for visiting the libraries. This was followed by employment information which is usually contained in newspapers. Since not all the respondents can afford newspapers and with the availability of photocopy machines which enable required information to be handy, respondents visit the library for such information. This service may not be readily available outside the library. Other required information by the respondents but which may not be as vital as academic information was information for personal development,

Table 6. Information materials required by postgraduate students.

Materials	Frequency	%
Textbooks/Monographs	30	19.4
Journal articles	89	57.4
Reference materials	22	14.2
Audio-Visual materials	14	9
Total	155	100

Source: Field data.

health information and political/global information. The result therefore identifies academic information as the predominant type of information normally sourced by respondents in the library.

Required library materials

The library materials required by respondents in their day-to-day academic pursuits are presented in Table 6. It shows that journal articles and textbooks/monographs were the main library materials normally required by respondents. This is apparent as these materials provide research students with recent theories and methodologies in diverse areas of African Studies, Peace and Conflict Resolution as well as in Peace Building. The materials also serve as a guide to theses and articles writing for publication in local and international journals. Indeed, a well written article or thesis cannot be achieved without the availability of these library materials. Through journals and monographs, methods for investigation can be replicated and redefined to suit local perspective; as well as show the direction of research and the areas of needs for further studies.

Analysis of the variation in level of satisfaction with library materials

Since the study examines postgraduate students' information needs and library resources availability, the research sought to find out if the level of satisfaction with available library materials varies among respondents across the three units under the Institute of African Studies. To determine this, One-Way Analysis of variance Test was employed. The response scale of highly satisfied (4 points), satisfied (3 points), slightly satisfied (2 points) and unsatisfied (1 point) was inputted into SPSS 20.0 software. The result obtained is shown in Table 7. The result obtained showed that the level of satisfaction with library materials does not vary across the three units of African Studies. This implies that the respondents hold similar opinion concerning the availability of materials in the studied libraries. Since the Institute carries out research on African related studies, the methods and theories used could be the same, due to

their affinity. Hence, there is high level of triangulation (borrowing/use of theories and methods) and synergy for a successful subject of investigation.

DISCUSSION

The study on the use of libraries by postgraduate studies of the Institute of African Studies for gathering and research information in relation to African Studies is depicted in Table 1 and Figure 1. The study revealed that Kenneth Dike Library (KDL) was the most used library because as the main library of the university, it has almost all the library resources and services needed by the postgraduate students. Others are faculty/departmental libraries. The study revealed that only available library resources available in these departmental libraries are made accessible to postgraduate students. The study shows that library resources/materials in the university libraries are accessible to postgraduate students. It may be postulated that students actually find it easier to locate materials in the library than searching online, a task which may seem less laborious; as majority of the theses/dissertations carried out in the Institute are not found online, and are only accessible in the library. The Institute of African Studies is yet to be automated. This calls for the need to upload theses online using the university's website for easy reference to future researchers. This finding agrees with those of Fidzani (1998) that researchers rely heavily on library resources. The study shows that theses, dissertations and journal articles are the most frequently referenced materials by research students, as they provide essential information for achieving cutting-edge research. This result confirms the finding of earlier and related studies, like those of Gooden (2001) and Echezona et al. (2011) that students make more reference to journal articles than other information sources because they are major sources of information for academics to carry out meaningful research.

The study revealed that theses, dissertations, journal articles, bibliographic services and textbooks/monographs are the main library resources readily available and accessible to postgraduate students for academic discourse. The study revealed that library resources are accessible and postgraduate students are satisfied with materials available. Positive as this response may sound, it may not hold for a majority of tertiary institutions in Nigeria, as many of the universities in the country do not have up-to-date materials for postgraduate programs mostly in the aspect of African Studies. As reported by Ajiboye and Tella (2007) that most of the universities in Nigeria lack resource materials for research. Academic information is recognized as the main information required by postgraduate students, which perhaps is the motive of their visit to the library. This is so as students are usually loaded with many assignments and seminar presentations which require no

Table 7. ANOVA result of the variation in level of satisfaction.

Source of variation	Sum of squares	Df	Mean square	F	Sig.
Between Groups	3.004	3	1.001	.895*	.445
Within Groups	168.905	151	1.119		
Total	171.910	154			

*Insignificant at 5% alpha level. Source: SPSS output.

any other place, other than the library. The library is therefore seen as the only environment to handle such a rigorous and herculean discourse.

The study gave important information on library materials that are readily available to students. It indicated that theses, dissertations, journals and newspapers/magazines were readily available for consultation by the students.

The study revealed that, among other library resources, theses and dissertations were used daily because they enable research gaps to be identified for further studies. This study found out that, academic information was the main information required by the students.

The study revealed that, journals, textbooks/monographs were the main library materials required by the postgraduate students and also serve as a guide to theses and article writing for publication in local and international journals. Certainly these materials provide research students with recent theories and methodologies in diverse areas of African Studies, Conflict Resolution and Peace Building. The analysis reveals that journal articles and textbooks/monographs are the main library materials required by research students. There is therefore the need to make these library materials readily available and accessible to postgraduate students to ease their research. This finding lends support to those of Okafor and Ukwoma (2007) that journals are more frequently used than other resources. In another study, Omekwu and Popoola (1991) and Nkiko and Adetoro (2007) found that monographs are cited more than journals in research discourse. This entails the importance of journal articles and textbooks/monographs in academic discourse, as their relevance varies with departments. The analysis also holds that postgraduate level of satisfaction with library materials do not vary across the three units of African Studies; as students happen to have similar feelings and opinion concerning the availability of materials in the studied libraries. This is apparent as a result of the synergy in the conduct of research in the Institute.

Conclusion

Though majority of the respondents gave positive responses on the examined variables, the negative responses call for concern and interventions in order to improve on the library materials for cutting-edge research in the present era of information and communication technology.

RECOMMENDATION

Renovation of the library building is necessary so that it will accommodate more seats for postgraduate students and other students who wish to use the library. The resources need to be of very high standard especially as more courses like Peace, Conflict Resolution and Peace Building are been added to other courses in the Institute. The Institute of African Studies Library needs to be automated to make retrieval of library materials easier for the students. The library is under staffed and that problem needs to be urgently addressed to enable the postgraduate students use the resources effectively. The library needs to be connected to the Internet to facilitate their research. A photocopying machine should be provided with a staff to attend to the students in the library at an affordable rate to discourage mutilation of materials by indigent students. Staffing the library is very important because without the Library Assistants, the students cannot use the library effectively. There is need for Library Assistants to be employed to assist the Senior Library Officer (SLO) in opening the Institute's library throughout the month especially when the SLO partakes in the twenty-four hours duty in Kenneth Dike Library which is mandatory for Librarians and Library Officers.

Acquisition of current journals, textbooks/monographs, reference materials and audio-visual materials which will enable the students project Audio Recorded Reel-Reel tapes available in the Senior Librarian Office for their research. The Institute's library should be updated to make it the most referenced library to meet the needs of African studies researchers.

Conflict of Interests

The author has not declared any conflict of interests.

REFERENCES

Adelani RO (2002).   Information needs and Information seeking behavior of science Lecturers in Federal College of Education. Abeokuta: a case study. Gateway Libr. J. 5 (1/2):61-68.

Ajiboye JO, Tella A (2007). University undergraduate students' information seeking behavior: implications for quality in higher education in Africa. Turkish Online J. Educ. Technol. 6(1):40-52.

Akinola SF (2009). Information seeking behavior of lecturers of Faculties of Education In Obafemi Awolowo University, Ile Ife and University of Ibadan. Samara J. Inform. Stud. 9(2):23-32.

Bii HK, Otike J (2003). Provision and accessibility of health information to the rural communities in Kenya: A case study of Bomet district. Afri. J. Libr. Arch. Inform. Sci. 13(2).

Brown CM (1999). Information seeking behavior of scientists in the electronic information age: astronomers, chemists, mathematicians and physicists. J. Am. Soc. Inform. Sci. 50(10):929-43.

Callinan JE (2005). Information – seeking behavior of undergraduate biology students: A comparative analysis of first year student at the University of Dublin. Libr. Rev. 54(2):86-99.

Case DO (2002). Looking for Information: A Survey of Research on Information Seeking, Needs, and Behavior. San Diego, CA: Academic Press, 350p.

Echezona RI, Okafor VN, Ukwoma SC (2011). Information sources used by postgraduate students in library and information science: a citation analysis of dissertation. Library Philosophy and Practice (e-journal), Paper 559

Ehikhamenor EA (1990). The use of formal information sources in physical science research in Nigerian Universities. Int. Libr. Rev. 22(3):149-159.

Fidzani BT (1998). Information needs and information-seeking behavior of graduate students at the University of Botswana. Libr. Rev. 47(7):329-340.

Gooden AM (2001). Citation analysis of chemistry dissertations: An Ohio State University case study. http://www.ist/org/o1-fall/index.html.

Haruna I, Mabawonku I (2001). Information Needs and Seeking Behavior of Legal Practitioners and Challenges of Law Libraries in Lagos. Nigeria. Int. Inform. Libr. Rev. 33:66-87.

Kahthau C (1993). Seeking meaning. A process approach to library and Information services. N.J: Abler. Norwood.

Kantumoya A (1992). Public libraries and community information services in Africa. Afri. J. Libr., Arch. Inform. Sci. 2(1):33-38.

Msuya J (2002). Information seeking behavior of library users in a changing library environment: the case of faculty of law staff members. University of Dar es Salam Libr. J. 4(1&2).

Nkiko C, Adetoro N (2007). Pioneer bachelor degree: Citation analysis of Covenant University Students' Research projects. Library philosophy and Practice.

Okey HO (1999). Funding in the Local Government System as a Strategy for Sustainable Rural Development in Nigeria. http://www.academicexcellencesociety.com/funding_in_the_local_government_system.html.

Okafor VN, Ukwoma SC (2007). Availability and use of information resources by academics in science and engineering faculties in Southern Nigerian Universities. Inform. Technol. 4(2):175-187.

Omekwu CO, Popoola S (1998). Improving citation behavior of University students in developing countries: A critical review of thesis literature at the University of Ibadan. Library Bulletin 2(1&2):44-51.

Opeke R (2002). Information as an empowerment tool for the poor in Nigeria: a research and policy agenda. Afr. J. Educ. Plann. Pol. Stud. 2:43-56.

Ranganadham S, Babu KS (2012). Awareness and use of library information resources and services in Osmania University, Hyderabad. Int. J. Lib. Inform. Stud. 2(3):42-54.

Sohail MD, Pandye A, Upadhyay AK (2012). Use of library resources in university libraries by students: a survey with special references the University of Kalian IASIC Bulletin 57(2):122-128.

Thompson C (2004). Needs. London Rutledge.

Uhegbu AN (2001). The Information User Issues and Themes. John Jacob's Classics, Enugu.

Wilson TD (1997). Information behavior. An inter-disciplinary perspective. Inform. Proc. Manage. 33(4):551-572.

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Full Length Research Paper

Changing functions of libraries and publishers in the digital information sources environment

Raid J. Sulaiman*, Serhan A. Ali Al Tawalbeh and Mustafa H. Ahmed

Al Hussein Bin Talal University, College of Arts, Library Science Department, Jordan.

The emergence of electronic information sources with rapid development in information technology played a major role in changing the function of libraries, publishers and information producers. Functions like indexing and abstracting were library functions but now it is entrusted to information aggregators and publishers. This study aimed to: First, define the role and function of libraries and information aggregators before and after the use of information technology in libraries and publishing establishments. Second, identify the factors that led to the change of the functions and roles of libraries, resulting from the evolution of information technology. Third, determine the future of library functions and publishing establishments and their requirements. Descriptive methodology was used in this study to describe and determine library functions before and after the widespread use of information technology. The main tool for gathering information about the future role of libraries and publishers in the digital environment was a questionnaire submitted for discussion by the librarian sub-group at linked-in. This study highlighted the future roles and functions of libraries and publishers that will enable librarians to properly plan for the future of their libraries in the continuing evolution of information technology and communications. The study has concluded that there is a continuous change in library and publishers' functions and this change is reflected on the method of providing library services.

Key words: Library functions, publishers, digital resources, electronic information, information technology, library future.

INTRODUCTION

The development of information technology greatly affected on information sources development and contributed in creating a new form of information sources. The emergence of the digital information sources as a result of using digital technology by libraries, publishers and digital information producers played a great role in changing libraries and information producer functions. For example, indexing and abstracting information sources were libraries' functions, but now venders and aggregators are involved with this function. Libraries also used to manage their own collections. However, in recent times a part of these collections, specifically digital

*Corresponding author. E-mail: riyslm@yahoo.com.

periodicals are managed by publishers. Furthermore, purchasing was the most reliable way of acquiring, but now subscription is an important method for acquisition of books and online journals.

The growing effect of information technology in the ever changing role and function of libraries and publishers is significant to be studied. It is an important requirement in today's high technology and digital world, to make libraries up-to-date with the continuing developments. To add to the value of identifying and documenting of the effects, studying these changes will enable libraries to forecast their roles and functions.

Using information technology and telecommunications in the different information sectors generate a new type of individuals and establishments dealing with the information, such as vendors and database aggregators.

Also, this study will focus on libraries and publishers' future in the digital environment which will help libraries in planning their future operations.

Goals of the study

This study aims at:

1. Determining the role and functions of libraries and publishers before and after using the information technology.
2. Exploring the future of libraries and publishers.
3. Determining the future role and function of libraries, publishers and information sources.

This paper aims to answer the following question: "What are the results of using the information technology in both libraries and publishing establishments?"

LITERATURE REVIEW

In Natarajan (2009) study which aimed to identify the changing roles of libraries and publishers in the digital environment he states that there is a problem in assessing the future of libraries, because libraries do not recognize the publisher's strategic plans for the future. "In the network world there is no need for resources to be stored in a large number of locations (e.g. libraries); a single source is theory sufficient and cost- effective. It is therefore not unlikely that in the future publishers will not continue to distribute journal through libraries, but rather make them available through their own network servers or digital repositories. The library will continue to provide its users access to these materials based on licenses agreements, but will no longer be allowed to store the materials in the library ".

In Horava (2008)'s study, the aim was to explore the roles of publishers and librarians and venders in high technology age, which makes transformation and inter-

section in there functions. He concluded that publishers have recognized the need for change so that they can be as active player in scholarly information market place. Horava thinks that the next step will be the creations of new formats through utilizing digital technologies. This new format will allow scholars to work in deeply integrated electronic research and publishing environments that will enable real-time dissemination, collaboration, dynamically-updated content and usage of new media. And of new media the roles of librarians and publisher are no longer distinct and mutually exclusive.

In Almaliki (2003)'s study which aims to determine the stages of turning libraries into the digital library he said that the dramatic changes brought by the communications revolution of modern and sophisticated networks, including the Internet has made libraries transformed into a digital library, and it has presence on the world wide web allowing access to the limitless amount of information. He shares the opinion of Kinneth E. Dowlin that libraries will be smart buildings that contain units to broadcast audios and videos capable of delivering library services to homes. Hishmat (1996), in his study which aims to review and analyze articles that discuss the future of libraries in 21 century, also shares Kinneth E. Dowlin's opinion and both wonder if libraries will stay until 2020. In Hishmat's study, David Raitt thinks that libraries in the future will continue to use electronic technology until they get to different levels of Interconnectedness through computers called Infoport.

Through reviewing the previous studies, this study will complete them in identifying the roles and functions of libraries and publishers before and after the implementation of information technology, and at the same time considered the opinions of a sample of librarians subgroups from all over the world.

Libraries' and publishers' functions before using information technology

The development of library functions is related to several key factors, political, economic and industrial. The expansion of conquests of Alexander the Great led to expand the Greek culture and increased the number of learners. In that period the knowledge branches started as independent scientific fields. The establishment of the Alexandria library in the time of Ptolemy 1 was a great event in libraries' history.

After the defeat of the Greek empire by the Romans, the first public library was established in Rome by Asinins Pollioin at the beginning of the 4th century A.D. Public libraries began its establishment in the big attics and there was a great passion to buy books by the Romans (Alfred and Reuben, 1950).

All that led to establishing the private libraries inside homes. In the middle Ages, with the advent of Christianity, church libraries emerged and increased in

number after the Romans turned into Christianity. Since the ninth century and until the twelfth century, monastery and church libraries were the most prevalent in Europe (Alfred and Reuben, 1950).

The main functions of the libraries at that time were gathering, organizing, translating and copying books and manuscripts. Libraries at that time played the role of universities. They were places for students and researchers to gather and conduct their studies. Furthermore, most of scientists were lecturing and conducting research in these libraries.

That means that those libraries were playing the following roles:

1- Educational role: as schools and universities.
2- Cultural role: gathering, organizing, and copying information sources and also as publishing establishments.
3-Social role: functioning as cultural centers.
4- Spiritual role: places to revive the spirit as described by the ancient Egyptians (Elean, 2007).

At the beginning of the 19th century and the emergence of publishers, publishing establishments embarked on copying and marketing the information resources, instead of libraries which were involved in this operation; that means a change in library functions.

With the emergence of schools and universities, the educational and cultural roles of libraries were greatly reduced and substituted step by step by schools and universities; thus, the educational role of libraries became a minor role.

Through that time, the roles of libraries evolved and transformed to become the conservation and organization of the national heritage by the national libraries. Another role was collecting educational information sources and organizing them. This role was taken by schools and academic libraries. Besides, providing information sources and analyzing them for specific users was done by special libraries.

So, at this stage through the roles we can specify library functions in general as:

1- Collecting information sources in different types.
2- Organizing information sources: Cataloging, classifying and indexing.
3-Facilitating the use of information sources through external and internal circulation and photocopying.

Regarding the publishing establishments, their roles were:

1. Producing information sources.
2. Marketing information sources.

Manfred (1981) said, "Libraries and publishers have evolved together. Publishers rely on libraries as markets for their products".

Since the 1960s, different modes of cooperation developed between libraries and publishers. The major efforts have been made, both in publishing and librarianship, in standardization for the purpose of rationalizing the workflow in publishing houses, libraries and in the book trade. They had one aim in common, which is to facilitate the access to publications regardless of the means and the place of publication (Daniela, 2008).

Publishers' functions were limited by their roles, so functions like indexing and abstracting were not related to publishing operations. But such functions became a part of the publishing operations after the emergence of the periodicals as one of the most important information sources.

Indexing and abstracting functions were developed rapidly as a part of the publishing process through the development of information technology.

Libraries' and publishers' functions after using information technology

The development of information and communication technology and the emergence of the internet changed the functions activated in libraries and publishing establishments as follows:

Libraries computerize most of their functions and activities like cataloging, classification, acquisition, circulation, information sources hybridization and periodical indexing.

Publishing establishments moved from the traditional to the electronic publishing. With that, publishers became involved in a new function related to electronic periodicals. This function is abstracting and indexing. Also publishers changed the marketing of information sources, especially that related to periodicals; it moved from acquisition to subscription. Thus causing changing strategy functions of libraries and becoming an intermediate between publishers and users. Therefore, libraries' functions were no longer storing periodicals in a traditional way, but such function was done by publishers. Now, libraries' role is limited to paying electronic periodical subscription fees for publishers to access their periodicals in the library rather than obtaining a hard copy for storage at the library. This situation led to the emergence of new establishments working as medium between library and information sources; these are the aggregators and vendors. The aggregators work on hybridizing, which means making electronic copies of the sources, and then submitting, indexing, abstracting, and classifying operations ending with digital storages.

Through that structure we can realize that roles of libraries have changed and that reflected on function, so that libraries do not store information sources, but provide access to them. That means libraries do not store, organize, index or classify information sources, because these functions moved to aggregators or vendors.

The current role of libraries is the coordination between users and database producers through aggregators or

vendors, thus gathering databases in one website or portal and providing advanced search services.

"Libraries and publishers have evolved together. Publishers rely on libraries as a minimum market for their scholarly products. A simple mathematical model for the dynamics of the interaction between libraries and publishers is analyzed. It derives a function for the supply curve of scholarly publications, and is used to estimate when an institution will have to spend as much per person on library support as on his or her salary if present trends continue. This is used to argue that present trends are unlikely to continue, but that a discontinuous shift in the production of scholarly output is likely to occur within a decade or two. Likely new forms of communication among scholars in "communicating classes" involving nearly simultaneous communication and a new kind of organized cumulative record are discussed. The implications for institutional changes not only in libraries and publishers and their interrelation but of new kinds of institutions are sketched" (Manfred, 1981).

The future of libraries and publisher's functions after using information technology

With continuing development of information and communication technology and the increasing reliance on digital technology in information storage at retrieval, traditional library in its classic concept will decline and technology will keep on carrying the roles and functions of libraries.

According to a Broward County (FL.) library employee, ''the future of library holding physical books seems gloomy''. Commenting on a post about bookless libraries, he points at the main reasons virtual libraries will increasingly replace print books libraries.

The relation between user and information producers will be a direct relation without intermediate. At the present, publishing establishment can be considered as libraries. Libraries will become museums containing copies of traditional books and manuscripts especially public libraries and academic libraries will melt between.

"The library building isn't a warehouse for books," said Helene Blowers, digital strategy director at the Columbus [Ohio] Metropolitan Library. "It's a community gathering center" (John, 2012).

Futurist Thomas Frey (2012) thinks that "Libraries, much like any living breathing organism, will have to adapt to the complex nature of the ever-changing world of information. As information becomes more sophisticated and complex, so will libraries".

Libraries are here to stay because they have a survival instinct. They have created a mutually dependent relationship with the communities they serve, and most importantly, they know how to adapt to the changing world around them.

Others stated in the subgroup of the American Library Association at (http://www.linkedin.com/) when asked what they think about the future of libraries, Meredith (Greater Seattle Area, System Federal) thinks that libraries are becoming museums for books and that the future of libraries needs to be thoroughly considered, especially when people stop visiting them. With the sophistication of newer technology in the libraries, and everyone owning their Nook or Kindle, libraries will become the new Coffee Shop with lounge chairs and small meeting rooms in a shopping area.

Dagne Woldie (IT Professionals at Ethiopian Civil Services College, International, Banglore University) asked whether we need libraries for the future. Currently, Woldie is working in the International School and talks about students and teachers visiting the library mostly when the internet is down. On the other side, the government and private schools do not even have books for kids and teachers.

Samantha Specht (Technology and Community Outreach Assistant at Public Library for Union County New said "Libraries have always supported lifelong learners. Even in today's new technology age that is still true. I see libraries as changing function to be a place where people can use, learn, and experience new technology in a safe unbiased space. In my position right now I teach older generations how to use new technology to keep up with the changing world. As e-books and other technologies continue to grow I expect to see more libraries offering similar classes. The focus may leave learning in a print format, but libraries will always support learning".

Akurut Juliet (Librarian at Pentecostal theological college in Uganda) said "the future of the publishers will still go on because there are people who prefer books to e-books but anywhere as librarian we should change the trend and function so as to cope up with the new technology, currently train my users how access free e-books on internet".

METHODOLOGY

This study used the descriptive methodology, and the main tools for gathering information were:

1. books and periodical articles used to determine library functions before the widespread use of information technology .
2. Literature review used to 1. determine library functions before the widespread use of information technology, and the changes which took place in the roles for both libraries and publishing establishments. 2. determine the recent situation and the future for libraries, publisher and information sources

The researchers put the following question for discussion by the librarian sub-group at linked-in.: "What is your opinion about the future role of libraries and publishers in the digital environment?".
The researchers analyzed librarian answers and then compared with the reviewed literature to anticipate the future.

STUDY RESULTS

The main functions of the libraries before using

information technology in the old period were gathering, organizing, translating and copying of books and manuscripts. Libraries at that time played educational, cultural and social roles.

In the 19th century, the main functions of the libraries were to collect, organize and facilitate information resources. Regarding the publishers, their roles were to produce and market information sources.

With the development of information and communication technology and the emergence of the internet, library and publisher were changed. This caused changing strategic functions of libraries and became an intermediate between publishers and users.

Now, libraries' role is limited to paying electronic periodical subscription fees for publishers to access their periodicals in the library rather than obtaining a hard copy for storage at the library. This situation led to the emergence of new establishments working as medium between library and information sources like aggregators and vendors. The aggregators work on hybridizing, which means making electronic copies of the traditional sources, and then submitting, indexing, abstracting, and classifying operations ending with digital storages.

Through that structure we realize that the current role of libraries is the coordination between users and database producers through aggregators or vendors.

Libraries and publishers have evolved together and publishers rely on libraries as a market for their scholarly products.

In the future, libraries will function with continuing development of information and communication technology, and technology will keep on carrying the roles and functions of libraries.

Virtual libraries will increasingly replace printed books libraries. The relation between user and information producers will be a direct relation without intermediate. At the present, publishing establishment can be considered as libraries. Libraries will become museums containing copies of traditional books and manuscripts especially public libraries, and academic libraries will melt between. The future of libraries needs to be considered, especially when people stop visiting them. Public libraries will become the new coffee shop with lounge chairs and small meeting rooms in a shopping area.

The future of publishers will still go on because there are people who prefer printed books to e-books, but libraries should change the function so as to cope with the new technology.

Conclusion

There is a continuous change in libraries and publisher's role and functions and also in providing information services, as a result of the successive developments in communication and information technology. Information sources which depend on information technology coerce library to follow a new approach in information sources acquisition, management and provision of their services. Libraries will have to adapt the complex nature of the ever-changing world of information. As information becomes more sophisticated and complex, so will libraries. Libraries are here to stay because they know how to adapt to the changing world around them.

Conflict of Interests

The author has not declared any conflict of interests.

REFERENCES

Alfred H, Reuben P (1950). A history of libraries scarecrow press. Translated by Shaban Khalefa. p.15-18 [1] Ibid .p21-31.

Almaliki MM (2003). Electronic library in new enviroment technology. J. King Fahid National library. 8(2):5-6. Retrieved from http://faculty.ksu.edu.sa/m_salem98/Other/

Daniela Ž (2008). Publishers and Libraries in the Information Society - Allies or Rivals? Information-Documentation Management and Cooperation among the Libraries in the Balkan Countries Symposium Papers, 5-7 June 2008, Edirne, Turkey / Bilar, E., Ekinci, Y., eds. (ed). - Edirne : Trakya Universitesi , 2008. 289-299 (ISBN: 978-975-374-090-6).

Elean RM (2007). Libraries and information and scientific research .Irbid. pp.3-33.

Hishmat Q (1996). Library and future :articals about libraries in 21th century . J. Libr. Inform. Arabic Stud. 1(1):205-216

Horava T (2008). "Libraries as publeshears; Publishers as Libraries- Where do we go from here?" Against the Grain .Sep 2008 Retrieved on January 10, 2013 from www.ageanst-thegrain.com

John DS (2012). "The future of libraries, with or without books" library gyan Tuesday, 17 April 2012 Retrieved fromhttp://edition.cnn.com/2009/TECH/09/04/future.library.technology/index.html

Manfred K (1981). "Interaction of libraries and publishers Original Research Article". Inform. Proc. Manage. 17(5):291-299

Natarajan MSK (2009). "Roles of libraries and Publishers in Knowledge Access and Management". ICAL 2009 – VISION AND ROLES OF THE FUTURE ACADEMIC LIBRARIES. Retrieved on January 10, 2013 fromhttp://crl.du.ac.in/ical09/papers/index_files/ical-26_232_497_2_RV.pdf

CITATION

The bookless library – Is that the future of libraries? (2012). library gyan- Monday, 3 September 2012 Retrieved from http://librarygyan.blogspot.com/2012/09/the-bookless-library-is-that-future-of_3.html

Full Length Research Paper

Captions resources and library patronage by hearing impaired students in university libraries of South-south Nigeria

Emem Paul Udofia[1]*, Daniel Aniekan Aloysius[1] and Abimbola Labake Agboke[2]

[1]Department of Educational Technology, and Library Science, Faculty of Education University of Uyo, Nigeria.
[2]Faculty of Social Sciences Resource Centre, University Library, Uyo, Nigeria.

This study investigated the availability of Captions Resources and Library Patronage by Hearing Impaired Students in University Libraries of South-South Nigeria. One research question and one hypothesis were formulated to guide the study and were tested at .05 level of significance. Survey research design was employed. The population for the study was 57 hearing impaired students from 10 universities in South-south Nigeria. Purposive sampling technique was used in the study. A structured questionnaire was developed and used to elicit information from the respondents. Frequency distribution and percentages were used to determine the level of availability and use while Pearson Products Moment Correlation (PPMC) was used to test the hypothesis. The findings revealed that significant relationship exists between availability of captions resources and library patronage by hearing impaired students. The findings also revealed the non-availability and patronage of captions resources by hearing impaired students. The study concludes that the provision of captions resources for the hearing impaired students in university libraries in South-south Nigeria will increase patronage. Based on the findings, it was recommended among others that universities in South-south Nigeria should provide captions resources for the hearing impaired students in their respective libraries.

Key words: Captions resources, interactive searching, relay services, functionality.

INTRODUCTION

There is a growing awareness in Nigeria of the need to remove every barrier to information access irrespective of handicaps and disabilities. This is so for library patrons with disabilities as reflected in the National Policy on Education (2004) which stipulates a definite provision of captions resources for the hearing impaired students in

Nigeria. Captioning is the process of converting audio information into text and displaying the text on the screen or monitor. They are words shown on a movie, television or computer monitor showing what is being said in the captions are synchronized with video image so that the viewer has equivalent access to the content that is

originally presented in sound, regardless whether they receive that content via audio or text. The benefit of closed caption to the hearing impaired students in institutions of higher learning had been identified by The University of Washington Library (2012) as allowing hearing impaired students benefit from the rich collection of the library by displaying audio and other digital information into text.

Captions resources have been of tremendous assistance to the hearing impaired students the world over. Data obtained from the National Institute on the Deafness (2012) indicate that there are 87 million deaf and hard of hearing people studying in different institutions in United Kingdom which equate to 14% of the population. Mitchell (2012) while commenting on a survey conducted by the Survey of Income and Programme Participation (SIPP) indicated that 1 in 20 US are currently deaf or hard of hearing. In a round number, nearly 10,000,000 are hard of hearing and close to 1,000,000 are functionally deaf. Although in Nigeria there are no data on the number of hearing impaired persons, it is estimated that several thousands are studying in different institutions of learning across Nigeria including academic institutions.

Objective of the study

The objective of this study was to investigate the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South Nigeria.

REVIEW OF RELATED LITERATURE

Captions resources are generally regarded as bridge linking deaf individuals to the digital world so that they have access to library materials, news, entertainment, and other information. Studies have shown the usefulness of caption to students with hearing impairment. Koskinen (1988) in two studies employed captioned television in reading instruction for secondary school deaf students. Withrow (1994) reported on projects implementing captioned media resources in libraries for persons with hearing impairment. He reported that students were comfortable, and read with concentration. Evmenova (2008) investigated the effectiveness of alternative narration, various alternative captioning (highlighted text and picture word-based), and interactive searching the video for answers on content comprehension of non-fiction general education videos by students with intellectual disabilities. The study programme. The National Centre on Accessible Information Technology in Education (2013) noted that showed that students enjoyed learning with captioning devices. It was further concluded that captioning offers effective adapted curriculum and interventions supporting inclusion of

students with disabilities into content based education. In a comparative study of captioned video and face-to-face instruction for secondary school students with hearing impairment conducted by Atinmo and Egunjobi (2010), the result indicates that there was a significant difference in the learning outcomes of participant exposed to captioned video instruction and the group control. This suggests that caption video is very effective in library use instruction of students with hearing impairment. Austin (1981) and Messelheiser (1996) (as cited in Atinmo and Egunjobi, 2010) carried out a study on usefulness of captioning video in teaching library use skills. The study discovered that captioned video is useful in teaching library use skills. The study concludes that libraries should provide captions resources in libraries for persons who are deaf or hard of hearing. Atinmo and Egunjobi (2010) observed that the provision of captions resources is necessary in the library because it is one manner of accommodating hearing impaired persons in institutions. Similarly, Withrow maintained that libraries should provide captioning for media such as videos, DVDs, and streamed media technologies for deaf and hard of hearing students in universities of higher learning. Omoniyi and Oluniyi (2012) conducted a study on the impact of captioned video instruction on Nigerian hearing-impaired pupils' performance in English Language. The result indicated that captions video was effective in giving English language instruction to hearing impaired pupils. Fakomogbon (1998) examined the coordinated team approach in developing captioned video tape instructional package for special learners. The study had deaf students in an introductory technology class as the subjects. The result indicated that hearing impaired students learned and used the library better using captions video. Hutchinson (2005) investigated the effects of using Americans with Disabilities Act (ACA) compliant captioned instructional digital video on learning outcomes of participants drawn from Mississippi State University TCK 1273 class. The result indicated no significant effect of ADA-compliant captioned video on the students learning outcome. Captioned video allows hard of hearing or deaf students to access audio programmes and resources in the library. The caption feature allows the designer to give library user a deeper understanding of the video and enable users benefit from the rich collections in the library. Adding captions and sub titles makes videos more accessible to hearing impaired library users who cannot follow along with the audio.

Research question

The following research question was raised to guide the study:

What is the relationship between the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South

Table 1. Distribution of population of the study.

Universities	Hearing impaired
University of Uyo	5
Akwa Ibom State University	2
University of Calabar	7
Cross River State University of Science and Technology	4
University of Port Harcourt	11
Rivers State University of Science and Technology	5
Delta State University	5
Niger Delta University	3
Edo State University	6
University of Benin	9
Total	**57**

Universities Admissions Units and Association for the Hearing Impaired Students, between 2007/2008-2012/2013 academic sessions.

Nigeria?

Hypothesis

The following null hypothesis was analyzed and tested at 0.5 level of significance.

Ho_1 There is no significant relationship between the availability of captions resources and library patronage by hearing impaired students in university libraries of South-South Nigeria.

METHODOLOGY

Research area

The area of this study is the South- south geo-political zone of Nigeria. The zone is popularly known as the Niger Delta oil zone of Nigeria. It is a tropical region, known for heavy rainfall. Major occupations are agriculture, fishing and extraction of raw materials, such as limestone, gold, oil etc; approximately 31 million people of more than 40 ethnic groups including the Bini, Efik, Ibibio, Annang, Oron, Ijaw, Itsekiri, Isoko, Urhobo, Ukwani, and Kalabari are among the inhabitants in the zone speaking about 250 different dialects. The South-south is made up of six states in the Federal Republic of Nigeria namely, Edo, Delta, Bayelsa, Akwa- Ibom, Rivers and Cross-River.

There are several academic institutions in the zone. They include the University of Uyo, Akwa Ibom State University, Obong University, Akwa Ibom State Polytechnic, Uyo City Polytechnic, Heritage Polytechnic, University of Calabar, Cross River State University of Science and Technology, Rivers State University of Science and Technology, University of Port Harcourt, Rivers State Polytechnic, Delta State University, Niger Delta University, Edo State University, Igbinedion University, Idahosa University, University of Benin. Etc.

Research design

Survey design was adopted for this study.

Population of the study

The population of the study was 57 consisting of all the hearing impaired students in universities in South-south Nigeria. The universities are University of Uyo, Akwa Ibom State University, University of Calabar, Cross River State University of Science and Technology, Rivers State University of Science and Technology, University of Port Harcourt, Delta State University, Niger Delta University, Edo State University and University of Benin (Table 1).

Sample and sampling technique

All the hearing impaired students were sampled (57). Purposive Sampling Technique was used in the study.

Instrumentation

A researcher-developed instrument was used in collecting data tagged "Captions Resources and Library Patronage by Hearing Impaired Questionnaire (CLPHIQ). The questionnaire was divided into two sections. Section A contained personal data of the respondent such as gender, age, name of institutions, faculty, department and course of study. Section B contained the questionnaire items generated in line with the research question and hypothesis. The questionnaire was developed on a four point rating scale; Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD) to determine the availability of resources and Daily (D), Weekly (W),Monthly (M), and Never (N) to determine the frequency of use with grading range of 4,3,2 and 1 respectively.

Administration of the instrument

The researchers collaborated with research assistants, who were students in the institutions under study to administer and collect the questionnaires.

Method of data analysis

Frequency distribution and percentages were used to determine the availability and frequency of use of the resources. Pearson Product Moment Correlation (PPMC) was used for testing the null hypothesis at 0.05 level of significance.

Table 2. Availability of captions for the hearing impaired students.

	SA	A	Total	%	D	SD	Total	%
The library provides closed captions that support my learning and research programme	-	-	-	-	19	38	57	100
The library provides open captions that support my learning and research programme	-	2	2	4.4	18	37	55	95.6
The library provides other captions resources that support my learning and research programme	-	-	-	-	22	35	57	100

Table 3. Patronage of captions resources by the hearing impaired students.

	Daily	%	Week I	%	Month	%	Never	%
How often do you utilize closed captions in the library?	-	-	-	-	-	-	57	100
How often do you utilize open captions in the library?	-	-	-	-	-	-	57	100
How often do you utilize other captioning resources in the library?	-	-	-	-	-	-	57	100

Table 4. Pearson product moment correlation analysis of the relationship between availability of captions resources and library patronage by the hearing impaired students in universities of South- South Nigeria.

Variable	$\dfrac{\sum X}{\sum Y}$	$\dfrac{\sum X^2}{\sum Y^2}$	$\sum XY$	r-ratio	Decision
Availability of Captions(x)	139	449		0.892	Significant
Patronage of Captions (y)	132	396	417		

Level of significance 0.05, df= 57-2, critical r-value 0.288.

FINDINGS

Frequency distribution and percentages of availability of captions resources and library patronage by impaired students

Table 2 indicates unavailability of captions resources in the library for the hearing impaired students. Only 2 students agreed that open captions are provided in the library, being 4.4% of the total response. The other 55 hearing impaired students disagreed as regards the availability of the resources in the library

In Table 3, all the hearing impaired students in universities of South-south Nigeria indicates none patronage of captions resources in the library.

Null hypothesis 1

There is no significant relationship between availability of captions resources and library patronage by the hearing impaired students in universities in South-south Nigeria. Data for testing the null hypothesis were obtained from

the questionnaire for the hearing impaired students.

The data in Table 4 indicate that the calculated r-value is 0.892, while the critical r-value is 0.288. Since the calculated r-value is greater than the critical value, the null hypothesis is rejected. This implies that there is a significant relationship between availability of captions resources and library patronage by the hearing impaired students in universities in South-south Nigeria.

DISCUSSION

Findings of this study revealed a significant relationship between availability of captions resources and library patronage by hearing impaired students in university libraries of South-south Nigeria. This denotes that library patronage of captions depends on its availability. A library that provides adequate captioning resources for the hearing impaired students will experience increased patronage, but in a situation where the resources are not available students will not use the library except for other purposes. Analysis of the data obtained in the study indicates that hearing impaired students in universities of

South-south Nigeria have not beenusing captioning resources because they are not stocked in the library. This result is supported by the University of Washington Library (2012), that this legacy hardware is expensive, making the caption a costly endeavour in several institutions of learning.

The National Association of Special Education (2012) points out that just as other normal students have information needs, which should be properly disseminated to them, libraries should stock print resources along with translated audio-visual materials and other assistive technology resources such as captioning. Consequently, Golub (2010) asserted that audio-materials such as audio tapes, video tapes, etc. should be translated into print formats to make information accessible to the deaf and persons who are hard of hearing. When transcribing video materials, all sounds and actions must be mentioned.

Conclusion

Indeed, this study has proven that patronage of captions resources in university libraries depends on its availability. The availability of captions in the library will increase patronage, but in a situation whereby these resources are not provided in the library, there will be no patronage by hearing impaired students. It was discovered in the study that universities of South-South Nigeria do not provide captions resources for the hearing impaired students, thereby resulting in none library patronage of the resources by these students.

Recommendations

Based on the findings of the study, the following recommendations were posited:

1. Universities should provide adequate captions resources for the hearing impaired students in the library to facilitate learning and research.
2. All academic institutions in Nigeria should provide these resources for the hearing impaired students as stipulated by the National Policy of Education.
3. The National Universities Commission (NUC) should not accredit any university in Nigeria that failed to provide resources for the hearing impaired students.
4. Federal and state governments should release funds stipulated for equipping of university libraries nationwide.
5. Library staff should be trained on the use of captions resources in order to offer effective services to the hearing impaired students.

Conflict of Interests

The authors have not declared any conflict of interests.

REFERENCES

Atinmo MI, Egunjobi RA ((2010). A comparative study of captioned video and face to face Instruction in library instruction for secondary school students with hearing impairment. Libr. Philos. Pract. 8(1).

Evmenova AS, Behrmann MM (2008). Lights! Camera! Captions!: Adapted and Interactive Video Instruction for Students with Intellectual Disabilities. 2008 SREE Conference Abstract Template Available: http://www.meetinglink.org/educationaleffectiveness/2008/conference/submission.

Fakomogbon MA (1998). Development of captioned videotape instructional package in introductory technology for hearing impaired students. Unpublished Ph.D Thesis, CSET Department, University of Ilorin, Nigeria.

Golub S (ed.) (2010). What is Legal Empowerment? An Introduction. Legal Empowerment: Practitioners Perspectives. International Development Law Organization.

Hutchinson TE (2005). An empirical investigation of the impact of redundancy as it relates to captioned instructional digital video compliant with the Americans with Disabilities Act. A Ph.D Thesis, Mississipi State University.

Koskinen PS (1988). Using captioned television in classroom reading instruction. Teaching English to Deaf and Second Language Students. 6(1):15-19.

Mitchell RE (2012). How many deaf people are there in the United States? Available at: research.gallaudet.edu/../deaf-US.php. (Retrieved Oct. 26, 2013).

National Centre on Accessible Information Technology in Education (2013). What is the difference between open and closed captioning. Available at: www.washingtong.edu/../articles%3f1050. (Retrieved August 23, 2012).

National Institute on Deafness and Other Communication Disorders (2012). Assistive devices for people with hearing, voice, speech impairment. Available at: www.nided.nih.gor>Home>Healthinfo>Hearing,ear infection and deafness. (Retrieved August 23, 2012).

National Policy on Education (2004). Federal Republic of Nigeria (4th Edition), Lagos: Nigerian, NERC Press.

Omoniyi T, Oluniyi E (2012). Impact of captioned video instruction on nigerian hearing-impaired pupils' performance in english language. The African Symposium: An online journal of the African Educational Research Network. Available at: http://www.ncsu.edu/aern/TAS12.2/TAS12.2Omoniyi.pdf. (Accessed April, 13, 2014)

University of Washington Library (2012). Services for users with disabilities. Available at: www.lib.washington.edu>Home>Usingthelibraries. (Retrieved Oct. 26, 2013).

Withrow FB (1994). Jericho: The walls come tumbling down. American Annals of the Deaf.139:18-21.

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